EXHIBIT 1 FILED UNDER SEAL



UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA

CIVIL ACTION NO. 3:20-CV-06754

GOOGLE LLC, V. SONOS, INC.

EXPERT REPORT OF JAMES E. MALACKOWSKI

June 22, 2022

1.	Background and Qualifications			
2.	Assignment			
3.	Sumi	nary of Opinions	7	
4.	Relevant Parties			
	4.1	Sonos, Inc.		
	4.2	Google LLC		
	4.3	Alphabet		
5.	The Dispute			
6.	The Patents-in-Suit			
	6.1	The '615 Patent	.14	
	6.2	The '885 Patent		
7.	Industry Background			
	7.1	Home Audio Player Market	. 17	
	7.2	Smart Speaker Market		
8.	Google's Accused Instrumentalities			
	8.1	'615 Patent Accused Instrumentalities	. 20	
	8.2	'885 Patent Accused Instrumentalities	. 22	
9.	Sonos's Patent-Practicing Products			
	9.1	Value of the '885 and '615 Patents Beyond Use in Products	. 26	
10.	Time	line of Events	. 27	
11.	Reas	onable Royalty Compensation	. 28	
	11.1	Overview	. 28	
	11.2	Hypothetical vs. Real World Negotiations		
	11.3	Nature of Rights Being Licensed		
	11.4	Comparable Licenses		
	11.5	Summary of Approach		
	11.6	Parties to the Negotiation		
	11.7	Hypothetical Negotiation Date		
	11.8	Compensation Period and Accused Royalty Base		
12.	Evaluation of Royalty 32			
	12.1	The Market Approach	. 33	
	12.2	The Income Approach		
	12.3	Cost Approach	.72	
13.		e Damages Calculations Are Conservatively Based on Reasonable Assumptions		
14.	Georgia-Pacific Factor Analysis			
	14.1	Factor #1: The royalties received by the patentee for the licensing of the patent-in-suit, proving or		
		tending to prove an established royalty.		
	14.2 14.3	Factor #2: The rates paid by the licensee for the use of other patents comparable to the patent-in-suit Factor #3: The nature and scope of the license, as exclusive or non-exclusive; or as restricted or non-	.76	
	11.0	restricted in terms of territory or with respect to whom the manufactured product may be sold	.77	

	14.4	not licensing others to use the invention or by granting licenses under special conditions designed to	
	14.5	preserve that monopoly	8
	14.5	competitors in the same territory in the same line of business; or whether they are inventor and promoter	78
	14.6	Factor #6: The effect of selling the patented specialty in promoting sales of other products of the licensee; the existing value of the invention to licensor as a generator of sales of his non-patented items; and the extent of such derivative or convoyed sales.	
	14.7	Factor #7: The duration of the patent and the term of the license.	
	14.8	Factor #8: The established profitability of the product made under the patent; its commercial success; and its current popularity.	
	14.9	Factor #9: The utility and advantages of the patented property over old modes or devices, if any, that had been used for working out similar results.)1
	14.10	Factor #10: The nature of the patented invention; the character of the commercial embodiment of it as owned and produced by the licensor; and the benefits to those who have used the invention	1
	14.11	Factor #11: The extent to which the infringer has made use of the invention; and any evidence probative of the value of that use	13
	14.12	Factor #12: The portion of the profit or the selling price that may be customary in the particular business or in comparable businesses to allow for the use of the invention or analogous inventions	19
	14.13	Factor #13: The portion of the realizable profit that should be credited to the invention as distinguished from non-patented elements, the manufacturing process, business risks, or significant features or improvements added by the infringer	9
	14.14	Factor #14: The opinion testimony of qualified experts.	
		Factor #15: The royalty that a licensor (such as the patentee) and a licensee (such as the infringer) would have agreed upon if both had been reasonably and voluntarily trying to reach an agreement; that is, the amount which a prudent licensee – who desired, as a business proposition, to obtain a license to manufacture and sell a particular article embodying the patented invention – would have been willing to pay as a royalty and yet be able to make a reasonable profit and which amount would have been acceptable by a prudent patentee who was willing to grant a license	
15.	Deter	mination of Reasonable Royalties	3
16.	Preju	dgment Interest	5
17.	Conc	lusion	5



1. BACKGROUND AND QUALIFICATIONS

James E. Malackowski is a Co-founder and Senior Managing Director of Ocean Tomo, LLC, a part of J.S. Held. Ocean Tomo provides Financial Expert, Management Consulting, and Advisory services related to intellectual property (IP) and other intangible assets; corporate accounting investigations; regulatory and reporting obligations; solvency and restructuring; and contractual or competition disputes. Practice offerings address economic damage calculations and testimony; accounting investigations and financial forensics; technology and intangible asset valuation; strategy and risk management consulting; mergers and acquisitions; debt and equity private placement; and IP brokerage. Subsidiaries of Ocean Tomo include Ocean Tomo Investments Group, LLC, a registered broker dealer. With more than 100 offices globally, J.S. Held assists clients – corporations, insurers, law firms, governments, and institutional investors – on complex technical, scientific, and financial matters across all assets and value at risk.

Along with Supreme Court Justice Stephen Breyer, Mr. Malackowski was inducted into the IP Hall of Fame in 2022, chosen by the IP Hall of Fame Academy from a long list of nominees put forward by the global IP community. Mr. Malackowski was recognized by the Academy in 2022 with the Q. Todd Dickinson Award, which honors those who have made significant contributions to IP as a business asset. Mr. Malackowski's inclusion into the IP Hall of Fame follows annual recognition since 2007 by leading industry publications as one of the 'World's Leading IP Strategists'. Significantly, Mr. Malackowski is listed among "50 Under 45" by IP Law & BusinessTM; included in the National Law Journal's inaugural list of 50 Intellectual Property Trailblazers & Pioneers; and, named as one of "The Most Influential People in IP" by Managing Intellectual PropertyTM. Mr. Malackowski was named as 1 of 50 individuals, companies and institutions that framed the first 50 issues of IAM Magazine as well as 1 of 60 leading global Economics Expert Witnesses by the same publication in 2014. In 2011 Mr. Malackowski was selected by the World Economic Forum as one of less than twenty members of the Network of Global Agenda Councils to focus on questions of IP policy. In 2013 he was inducted into the Chicago Area Entrepreneurship Hall of Fame by the Institute for Entrepreneurial Studies at the University of Illinois at Chicago College of Business Administration. In 2018, Mr. Malackowski joined the Standards Development Organization Board of the Licensing Executives Society (USA & Canada), Inc. governing voluntary consensus-based professional practices that are guided in their development by the American National Standards Institute's (ANSI) Essential Requirements. LES standards are designed to encourage and teach consensus practices in many of the business process aspects of intellectual capital management.

On more than one hundred occasions, Mr. Malackowski has served as an expert in U.S. Federal Court, U.S. Bankruptcy Court, State Court, Court of Chancery, the Ontario Superior Court of Justice, the U.S. Patent and Trademark Office Patent Trial and Appeal Board, and global arbitrations on questions relating to intellectual property economics including the subject of valuation, reasonable royalty, lost profits, price erosion, commercial success, corrective advertising, creditor allocations, Hatch Waxman Act market exclusivity, business significance of licensing terms including RAND obligations, venture financing including expected risk / return, and equities of a potential injunction. Mr. Malackowski's experience extends to matters of general business valuation and commercial disputes, both domestic and foreign. Mr. Malackowski has publicly addressed policy issues affecting international trade and has provided expert opinions concerning antidumping and countervailing duties imposed by the U.S. Department of Commerce as well as testimony on domestic industry, bond, and remedies before the International Trade Commission.



Mr. Malackowski has substantial experience as a Board Director for leading technology corporations and research organizations as well as companies with critical brand management issues. He is Past President of The Licensing Executives Society International, Inc., with oversight for more than ten thousand members in thirty-two countries. Mr. Malackowski focuses his non-for-profit efforts with organizations leveraging science and innovation for the benefit of children and students, including those located in lesser developed countries. He has served since 2002 as a Trustee or Director of the National Inventors Hall of Fame, Inc., an organization providing summer enrichment programs for more than 100,000 students annually. For more than ten years Mr. Malackowski served as a Director of Chicago's Stanley Manne Children's Research Institute, advancing the organization's agenda to measure and report the impact of its pediatric research. He most recently served on the Pritzker School of Molecular Engineering Council at the University of Chicago.

Mr. Malackowski is a frequent speaker on emerging technology markets and related financial measures. He has addressed mass media audiences including Bloomberg Morning Call, Bloomberg Evening Market Pulse, Bloomberg Final Word, CNBC Closing Bell, CNBC On the Money, CNBC Street Signs, CNBC World Wide Exchange, CBS News Radio, and Fox Business National Television as well as other recognized news-based internet video channels. Mr. Malackowski is a current or past judge for the Illinois Technology Association's CityLIGHTSTM Innovation Awards program, the University of Notre Dame McCloskey Venture Competition, 1st Source Faculty Commercialization Awards, and PBS's Everyday Edisons.

As an inventor, Mr. Malackowski has more than twenty issued U.S. patents. He is a frequent instructor for graduate studies on IP management and markets and a Summa Cum Laude graduate of the University of Notre Dame majoring in accountancy and philosophy. Mr. Malackowski is Certified/Accredited in Financial Forensics, Business Valuation, and Blockchain Fundamentals. He is a Certified Licensing Professional and a Registered Certified Public Accountant in the State of Illinois. Mr. Malackowski has been certified to receive United States Sensitive Security Information (SSI) as governed by Title 49 Code of Federal Regulations.

A detailed version of my curriculum vitae is attached as Appendix 1.

Ocean Tomo is presently being compensated for my work in this matter at my current billing rate of \$1,200 per hour. Other Ocean Tomo consultants are assisting me in this engagement and are being compensated at rates less than \$1,200 per hour.¹ No part of my compensation depends on the outcome of this dispute.

2. ASSIGNMENT

Ocean Tomo was retained on February 23, 2022 by counsel for Sonos, Inc. ("Sonos") in connection with this matter. Ocean Tomo was asked to analyze certain accounting, financial, marketing, and other business data in order to identify the amount of compensation that would be appropriate for Sonos to receive in the event that liability is found against Google LLC ("Google") for infringement of the asserted claims of U.S. Patent No. 9,967,615 ("the '615 Patent" or "Direct Control Patent") and/or U.S. Patent No. 10,848,885 ("the '885 Patent" or "Zone Scene Patent"), (collectively, the "Asserted Patents", or "Patents-in-Suit"). Separately, I

¹ Other Ocean Tomo consultants that assisted me in this engagement include Robert Hess, Daniel Principe, Matthew Johnson, Jack Kelly, and Nathan Blanchette.

Page 7 of 9

understand that Sonos has also claimed infringement of certain claims of U.S. Patent No. 10,779,033 ("the '033 Patent") and U.S. Patent No. 10,469,966 ("the '966 Patent"); this report does not specifically calculate compensation due to Sonos in the event liability is found against Google for the '033 Patent or the '966 Patent.² Moreover, per the rules of Judge Alsup's patent showdown, this report does not calculate compensation due to Sonos for any of Google's indirect infringement of the Asserted Patents.

In order to accurately assess the measures and amounts of monetary recovery due to Sonos, Ocean Tomo has relied upon the following types of documents and other information:

- The pleadings;
- Discovery requests and responses;
- Documents produced by Sonos;
- Documents produced by Google;
- Transcripts of and related exhibits to depositions of various Google witnesses including:
 - 30(b)(6) Deposition of Michael Maigret, May 13, 2022;³
 - Deposition of Chris Cooke, June 7, 2022;⁴
 - Deposition of Ali Mills, May 13, 2022;⁵
- Publicly available information relating to the parties, the relevant market, and competing products;
- Telephonic conversations with:
 - Nick Millington, Sonos Chief Innovation Officer;
 - Pete Pederson, Sonos VP, Global Marketing & Communications;
 - Mark Triplett, Sonos VP, Intellectual Property;
 - Dr. Kevin Almeroth, Technical Expert r.e. the '885 Patent;
 - Dr. Douglas Schmidt, Technical Expert r.e. the '615 Patent;
- Expert Reports of:
 - Dr. Kevin Almeroth;6
 - Dr. Douglas Schmidt.⁷

² Sonos, Inc.'s Third Amended Complaint, Sonos, Inc., v. Google, LLC, 3:21-c-07559, March 30, 2022, pp. 18-71.

³ 30(b)(6) Deposition of Michael Maigret, May 13, 2022, p. 1.

⁴ Deposition of Chris Cooke, June 7, 2022, p. 1.

⁵ Deposition of Ali Mills, May 13, 2022, p. 1.

⁶ Opening Expert Report of Dr. Kevin C. Almeroth for "Patent Showdown," June 22, 2022, pp. 1, 6.

⁷ Opening Expert Report of Douglas C. Schmidt, June 22, 2022, p. 1.



A detailed listing of documents reviewed by Ocean Tomo in connection with this litigation to date is included in Appendix 2. References to documents and testimony herein are meant to provide examples of supporting information but are not intended to be a comprehensive or exhaustive list of all known support. In addition to this report, I may rely on video excerpts taken from videotaped depositions and/or demonstrative exhibits that illustrate the concepts and conclusions contained in this report. Such excerpts and/or demonstratives have not yet been prepared.

In connection with my work in this matter I have assumed that the Patents-in-Suit are valid, enforceable, and infringed. That assumption is made exclusively for the purpose of calculating damages in this matter and in no way represents a legal conclusion. The opinions discussed throughout this report are based on my current understanding of the facts and circumstances surrounding this matter, my review of the produced documentation, testimony, third party information available to date and any underlying assumptions upon which I have relied. As such, the analyses and opinions described herein are subject to change based upon additional discovery or any other relevant development. I reserve the right to submit a supplemental report if both necessary and allowed by the Court.

3. SUMMARY OF OPINIONS

Based on the totality of the circumstances in this case and the information available to me at this time, I have concluded that the appropriate form of compensation in this case, for both Sonos's Direct Control Patent and Zone Scene Patent claims, is an award of reasonable royalty damages.

I have analyzed quantitative and qualitative valuation metrics, including the *Georgia-Pacific* factors, and have reached a conclusion regarding the appropriate reasonable royalties due Sonos. In my opinion the total royalty rate for the Direct Control Patent is \$0.998 and the total royalty rate for the Zone Scene Patent is \$0.87 resulting in damages of \$7,875,266 and \$10,098,989, respectively.9

^{8 \$0.82} royalty rate for advertising revenue + \$0.17 royalty rate for subscription revenue = \$0.99.

⁹ Appendix 3.1.





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